RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/532,064_
Source: _PCT/10_
Date Processed by STIC: _4/29/05_

ENTERED

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          RAW SEQUENCE LISTING                    DATE: 04/29/2005
          PATENT APPLICATION:  US/10/532,064      TIME: 16:01:41

          Input Set : A:\050253.txt
          Output Set: N:\CRF4\04292005\J532064.raw

    3 <110> APPLICANT: AMANO ENZYME INC.
    4       SUZUKI, Kanako
    5       TSUKAGOSHI, Norihiro
    7 <120> TITLE OF INVENTION: Microorganism in which an isomaltose-producing enzyme is
deleted
    9 <130> FILE REFERENCE: P0205201
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/532,064
C--> 11 <141> CURRENT FILING DATE: 2005-04-20
   11 <150> PRIOR APPLICATION NUMBER: JP P2002-307922
   12 <151> PRIOR FILING DATE: 2002-10-23
   14 <160> NUMBER OF SEQ ID NOS: 27
   16 <170> SOFTWARE: PatentIn version 3.1
   18 <210> SEQ ID NO: 1
   19 <211> LENGTH: 11
   20 <212> TYPE: DNA
   21 <213> ORGANISM: Artificial Sequence
   23 <220> FEATURE:
   24 <223> OTHER INFORMATION: Description of Artificial Sequence: an enhancer sequence
   26 <220> FEATURE:
   27 <221> NAME/KEY: misc_feature
   28 <222> LOCATION: (6)..(11)
   29 <223> OTHER INFORMATION: n stands for any base
   32 <400> SEQUENCE: 1
W--> 33 ccaatnnnnn n                                                          11
   36 <210> SEQ ID NO: 2
   37 <211> LENGTH: 14
   38 <212> TYPE: DNA
   39 <213> ORGANISM: Artificial Sequence
   41 <220> FEATURE:
   42 <223> OTHER INFORMATION: Description of Artificial Sequence: an enhancer sequence
   44 <220> FEATURE:
   45 <221> NAME/KEY: misc_feature
   46 <222> LOCATION: (4)..(12)
   47 <223> OTHER INFORMATION: n stands for any base
   50 <400> SEQUENCE: 2
W--> 51 cggnnnnnnn nngg                                                       14
   54 <210> SEQ ID NO: 3
   55 <211> LENGTH: 11
   56 <212> TYPE: DNA
   57 <213> ORGANISM: Artificial Sequence
   59 <220> FEATURE:
   60 <223> OTHER INFORMATION: Description of Artificial Sequence: an enhancer sequence
   62 <400> SEQUENCE: 3
   63 ccaattagaa g                                                           11
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      Input Set : A:\050253.txt
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 66 <210> SEQ ID NO: 4
 67 <211> LENGTH: 14
 68 <212> TYPE: DNA
 69 <213> ORGANISM: Artificial Sequence
 71 <220> FEATURE:
 72 <223> OTHER INFORMATION: Description of Artificial Sequence: an enhancer sequence
 74 <220> FEATURE:
 75 <221> NAME/KEY: misc_feature
 76 <222> LOCATION: (5)..(5)
 77 <223> OTHER INFORMATION: n stands for any base
 80 <220> FEATURE:
 81 <221> NAME/KEY: misc_feature
 82 <222> LOCATION: (10)..(10)
 83 <223> OTHER INFORMATION: n stands for any base
 86 <400> SEQUENCE: 4
W--> 87 cgghnwwwwn whgg   14
 90 <210> SEQ ID NO: 5
 91 <211> LENGTH: 14
 92 <212> TYPE: DNA
 93 <213> ORGANISM: Artificial Sequence
 95 <220> FEATURE:
 96 <223> OTHER INFORMATION: Description of Artificial Sequence: an enhancer sequence
 98 <400> SEQUENCE: 5
 99 cggwwwwwww whgg   14
102 <210> SEQ ID NO: 6
103 <211> LENGTH: 14
104 <212> TYPE: DNA
105 <213> ORGANISM: Artificial Sequence
107 <220> FEATURE:
108 <223> OTHER INFORMATION: Description of Artificial Sequence: an enhancer sequence
110 <400> SEQUENCE: 6
111 cggaaattta aagg   14
114 <210> SEQ ID NO: 7
115 <211> LENGTH: 14
116 <212> TYPE: DNA
117 <213> ORGANISM: Artificial Sequence
119 <220> FEATURE:
120 <223> OTHER INFORMATION: Description of Artificial Sequence: an enhancer sequence
122 <400> SEQUENCE: 7
123 cggaatttaa acgg   14
126 <210> SEQ ID NO: 8
127 <211> LENGTH: 14
128 <212> TYPE: DNA
129 <213> ORGANISM: Artificial Sequence
131 <220> FEATURE:
132 <223> OTHER INFORMATION: Description of Artificial Sequence: an enhancer sequence
134 <400> SEQUENCE: 8
135 cggaaattta acgg   14
138 <210> SEQ ID NO: 9

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PATENT APPLICATION: US/10/532,064   TIME: 16:01:41

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139 <211> LENGTH: 128
140 <212> TYPE: DNA
141 <213> ORGANISM: Artificial Sequence
143 <220> FEATURE:
144 <223> OTHER INFORMATION: Description of Artificial Sequence:a DNA fragment including
CCAAT
145        sequence and SRE
147 <400> SEQUENCE: 9
148 ccaattagaa gcagcaaagc gaaacagccc aagaaaaagg tcggcccgtc ggccttttct      60
150 gcaacgctga tcacgggcag cgatccaacc aacaccctcc agagtgacta ggggcggaaa     120
152 tttaaagg                                                            128
155 <210> SEQ ID NO: 10
156 <211> LENGTH: 196
157 <212> TYPE: DNA
158 <213> ORGANISM: Artificial Sequence
160 <220> FEATURE:
161 <223> OTHER INFORMATION: Description of Artificial Sequence:a DNA fragment including
CCAAT
162        sequence and SRE
164 <400> SEQUENCE: 10
165 ctgcagacca cctctaggca tcggacgcac catccaatta gaagcagcaa agcgaaacag      60
167 cccaagaaaa aggtcggccc gtcggccttt tctgcaacgc tgatcacggg cagcgatcca     120
169 accaacaccc tccagagtga ctaggggcgg aaatttaaag ggattaattt ccactcaacc     180
171 acaaatcaca ctgcag                                                    196
174 <210> SEQ ID NO: 11
175 <211> LENGTH: 193
176 <212> TYPE: DNA
177 <213> ORGANISM: Artificial Sequence
179 <220> FEATURE:
180 <223> OTHER INFORMATION: Description of Artificial Sequence:a DNA fragment including
CCAAT
181        sequence and SRE
183 <400> SEQUENCE: 11
184 ctcgagaggc atcggacgca ccatccaatt agaagcagca aagcgaaaca gcccaagaaa      60
186 aaggtcggcc cgtcggcctt ttctgcaacg ctgatcacgg gcagcgatcc aaccaacacc     120
188 ctccagagtg actaggggcg gaaatttaaa gggattaatt tccactcaac cacaaatcac     180
190 agtcggcggc cgc                                                       193
193 <210> SEQ ID NO: 12
194 <211> LENGTH: 615
195 <212> TYPE: DNA
196 <213> ORGANISM: Aspergillus oryzae
198 <220> FEATURE:
199 <221> NAME/KEY: promoter
200 <222> LOCATION: (1)..(615)
201 <223> OTHER INFORMATION:
W--> 203 <400> 12
204 gaattcatgg tgttttgatc attttaaatt tttatatggc gggtggtggg caactcgctt      60
206 ccgggcaact cgcttaccga ttacgttagg gctgatattt acgtaaaaat cgtcaaggga     120
208 tgcaagacca aagtagtaaa accccggagt caacagcatc caagcccaag tccttcacgg     180
210 agaaacccca gcgtccacat cacgagcgaa ggaccacctc taggcatcgg acgcaccatc     240
212 caattagaag cagcaaagcg aaacagccca agaaaaggt cggcccgtcg gccttttctg     300
214 caacgctgat cacgggcagc gatccaacca acaccctcca gagtgactag gggcggaaat     360
```

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```
216 ttaaagggat taatttccac tcaaccacaa atcacagtcg tccccggtat tgtcctgcag    420
218 aatgcaattt aaactcttct gcgaatcgct tggattcccc gccctggcc gtagagctta     480
220 aagtatgtcc cttgtcgatg cgatgtatca caacatataa atactagcaa gggatgccat    540
222 gcttggagga tagcaaccga caacatcaca tcaagctctc ccttctctga acaataaacc    600
224 ccacagaagg cattt                                                     615
227 <210> SEQ ID NO: 13
228 <211> LENGTH: 44
229 <212> TYPE: DNA
230 <213> ORGANISM: Artificial Sequence
232 <220> FEATURE:
233 <223> OTHER INFORMATION: Description of Artificial Sequence: a PCR primer designed
for amp
234        lifying CCAAT sequence
236 <400> SEQUENCE: 13
237 ccgctcgagg caccatccaa ttagaagcgc ggccgctaaa ctat                      44
240 <210> SEQ ID NO: 14
241 <211> LENGTH: 44
242 <212> TYPE: DNA
243 <213> ORGANISM: Artificial Sequence
245 <220> FEATURE:
246 <223> OTHER INFORMATION: Description of Artificial Sequence: a PCR primer designed
for amp
247        lifying CCAAT sequence
249 <400> SEQUENCE: 14
250 atagtttagc ggccgcgctt ctaattggat ggtgcctcga gcgg                      44
253 <210> SEQ ID NO: 15
254 <211> LENGTH: 46
255 <212> TYPE: DNA
256 <213> ORGANISM: Artificial Sequence
258 <220> FEATURE:
259 <223> OTHER INFORMATION: Description of Artificial Sequence: a PCR primer designed
for amp
260        lifying SRE
262 <400> SEQUENCE: 15
263 gactagttaa cctaggggcg gaaatttaac gggatgttaa ctagtc                    46
266 <210> SEQ ID NO: 16
267 <211> LENGTH: 46
268 <212> TYPE: DNA
269 <213> ORGANISM: Artificial Sequence
271 <220> FEATURE:
272 <223> OTHER INFORMATION: Description of Artificial Sequence: a PCR primer designed
for amp
273        lifying SRE
275 <400> SEQUENCE: 16
276 gactagttaa catcccgtta aatttccgcc cctaggttaa ctagtc                    46
279 <210> SEQ ID NO: 17
280 <211> LENGTH: 30
281 <212> TYPE: DNA
282 <213> ORGANISM: Artificial Sequence
284 <220> FEATURE:
285 <223> OTHER INFORMATION: Description of Artificial Sequence: a PCR primer designed
for amp
286        lifying a DNA fragment including CCAAT sequence and SRE
```

288 <400> SEQUENCE: 17

```
289 aaactgcaga ccacctctag gcatcggacg                          30
292 <210> SEQ ID NO: 18
293 <211> LENGTH: 30
294 <212> TYPE: DNA
295 <213> ORGANISM: Artificial Sequence
297 <220> FEATURE:
298 <223> OTHER INFORMATION: Description of Artificial Sequence: a PCR primer designed
for amp
299        lifying a DNA fragment including CCAAT sequence and SRE
301 <400> SEQUENCE: 18
302 tttctgcagt gttgatttgt ggttgagtgg                          30
305 <210> SEQ ID NO: 19
306 <211> LENGTH: 27
307 <212> TYPE: DNA
308 <213> ORGANISM: Artificial Sequence
310 <220> FEATURE:
311 <223> OTHER INFORMATION: Description of Artificial Sequence: a PCR primer designed
for amp
312        lifying a DNA fragment including CCAAT sequence and SRE
314 <400> SEQUENCE: 19
315 cggctcgagg catcggacgc accatcc                             27
318 <210> SEQ ID NO: 20
319 <211> LENGTH: 40
320 <212> TYPE: DNA
321 <213> ORGANISM: Artificial Sequence
323 <220> FEATURE:
324 <223> OTHER INFORMATION: Description of Artificial Sequence: a PCR primer designed
for amp
325        lifying a DNA fragment including CCAAT sequence and SRE
327 <400> SEQUENCE: 20
328 atagtttagc ggccgccgac tgtgatttgt ggttgagtgg               40
331 <210> SEQ ID NO: 21
332 <211> LENGTH: 45
333 <212> TYPE: DNA
334 <213> ORGANISM: Artificial Sequence
336 <220> FEATURE:
337 <223> OTHER INFORMATION: Description of Artificial Sequence:a primer for site-
directed mut
338        agenesis
340 <400> SEQUENCE: 21
341 cgcttggatt ccccgcccgc ggccgcagag cttaaagtat gtccc          45
344 <210> SEQ ID NO: 22
345 <211> LENGTH: 45
346 <212> TYPE: DNA
347 <213> ORGANISM: Artificial Sequence
349 <220> FEATURE:
350 <223> OTHER INFORMATION: Description of Artificial Sequence:a primer for site-
directed mut
351        agenesis
353 <400> SEQUENCE: 22
354 gaatgcaatt taaactcttc ctcgagtcgc ttggattccc cgccc          45
357 <210> SEQ ID NO: 23
358 <211> LENGTH: 47
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359 <212> TYPE: DNA

RAW SEQUENCE LISTING ERROR SUMMARY　　DATE: 04/29/2005
PATENT APPLICATION:　US/10/532,064　　TIME: 16:01:42

Input Set : **A:\050253.txt**
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<u>Please Note:</u>
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 6,7,8,9,10,11
Seq#:2; N Pos. 4,5,6,7,8,9,10,11,12
Seq#:4; N Pos. 5,10

)

VERIFICATION SUMMARY   DATE: 04/29/2005
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Input Set : **A:\050253.txt**
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L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:33 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:51 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:87 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:203 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:12,Line#:201